

## BRIDGES, FLOODING, AND HANAPĒPĒ: CONNECTING, SECURING, AND GROWING A MODERN COMMUNITY WITH ANCIENT ROOTS

The Hanapēpē Bridge on Kaunualii Highway is associated with the development of Kaua'i's Belt Road system, and the commercial growth and social fabric of Hanapēpē Town. Settlement in Hanapēpē began centuries ago with Hawaiian people, who established villages, trail systems, heiau, agricultural and aquacultural complexes throughout the valley and along the coast. 19th century accounts describe Hanapēpē as a fertile landscape with a significant Hawaiian population under the leadership of the ruling chief Kaunualii and the high chiefs Kupihea and Kiaimoku.

Historic Hanapēpē town began in the mid-nineteenth century as an agricultural community of Hawaiian kalo (taro) planters and Chinese rice farmers. Throughout the late 19th and early 20th centuries, more immigrant laborers arrived, expanding farming, establishing businesses, and creating a lively nightlife, distinguishing Hanapēpē town from its neighbors.

During that time, Hanapēpē experienced flooding which frequently destroyed wooden bridges spanning the river. In 1911, a concrete bridge and a swinging pedestrian footbridge were built, improving reliable access and passage through the community. Although the makai Hanapēpē Bridge, constructed in 1938, bypassed the town's business center, it provided opportunities for expansion and growth.

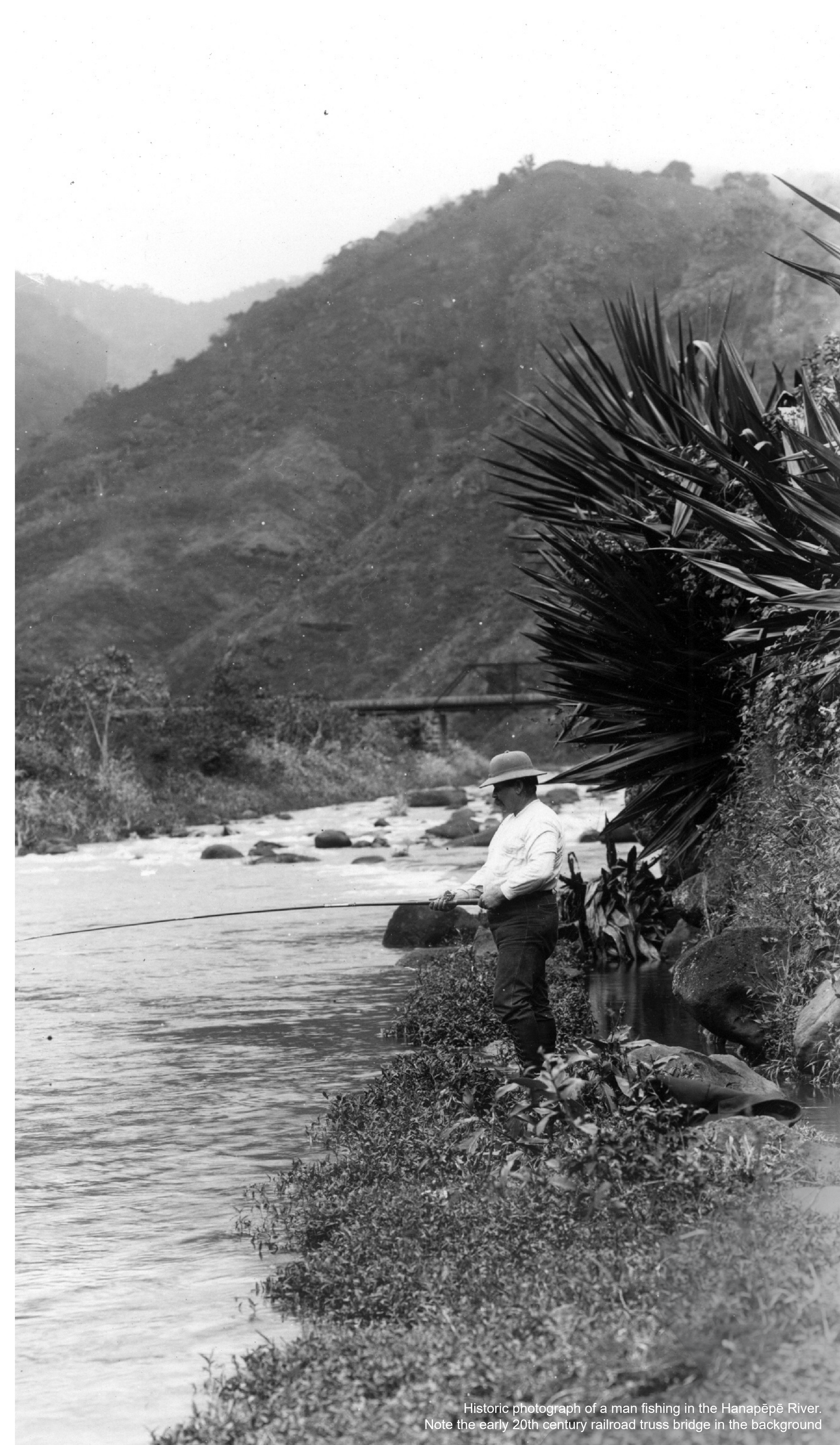
A Federal Highway Aid Project (FAP), the Hanapēpē Bridge was built using matching federal and territorial government funds. It is the work of master engineer William Bartels and builder James W. Glover. Technologically advanced and complex for its time, the bridge exemplifies 1930s-era concrete bridges on Kaua'i. In 2016, the Hanapēpē Bridge was named to the Historic American Engineering Record (HAER; HAER HI-137).

Bridges in Hanapēpē were central to decades of life and community. They connected the west and east sides of the town, and residents to commercial centers, public and agricultural spaces. The Hanapēpē Bridge was a vantage point upriver and gathering place for fishermen. Children played on the bridge and crabbed in the waters around it. Chickens, pigs, crops, and nursery plants were also raised near the bridges.

Hawaiian and English-language newspapers reported widespread property damage and loss from repeated catastrophic flooding. This prompted the construction of the Hanapēpē Levee, an earthen and piled basalt stone berm (designated State Inventory of Historic Places # 50-30-09-2283) between 1959 and 1966 on the left and right banks of the lower Hanapēpē River. The levee consisted of 2,200 feet of levee and flood wall on the left bank, and 4,465 feet of levee on the right riverbank, which were enhanced in 1966 for greater flood protection. The County of Kaua'i currently operates the levee, which continues to safeguard the homes and commercial buildings of Hanapēpē.



U.S. Army Corps of Engineers  
map of the Hanapēpē Levee



Historic photograph of a man fishing in the Hanapēpē River.  
Note the early 20th century railroad truss bridge in the background



Historic 1941 photograph of a woman standing on the Hanapēpē Bridge on  
Kaunualii Highway, looking mauka (toward the mountains). See inset for  
location of the left bank of the Hanapēpē Levee built between 1959 and 1966

## HANAPĒPĒ WAHI PANA: A STORIED HAWAIIAN LANDSCAPE

Hanapēpē, the name of this ahupua'a (ancient land division extending from the mountains to the ocean), literally translates to "crushed bay," a reference to the frequent landslides of the area. Hanapēpē is an abundant, dynamic ahupua'a, home to centuries and generations of Hawaiian people. Long ago, settlements, agricultural and irrigation systems, trail networks, and some of the largest, most numerous heiau (temple complexes) on Kaua'i were constructed.

Hundreds of wahi pana – storied places associated with Hawaiian people, supernatural beings, and deities from across the archipelago and Polynesia – are located throughout Hanapēpē Ahupua'a. Wahi pana are remembered in oli (chants), hula (traditional dance), 'ōlelo no'eau (proverbs), ka'ao (legends), and many other art forms practiced by Hawaiians today. As the memory of the people, wahi pana explain or reveal a diverse abundance of landscape resources, and illustrate the intimate relationship Hawaiians cultivated and continue to strengthen with their land.

## MANUAHI

A valley named for the 'alae 'ula bird from whom Maui learned the secret of fire

Mapped in yellow, the ka'ao of *Nā Mai'a O Manuahi* tells the story of Kekanaka'i'imi'ike (the man constantly seeking knowledge) who expertly navigates Manuahi Valley to protect two kupua (demigods), Melemele and Polapola, from the greedy chief 'Ānunu. In gratitude, the two kupua gift Kekanaka'i'imi'ike with prized varieties of mai'a (bananas) that nourish the people of Kaua'i for generations. Kekanaka'i'imi'ike eventually lives with Melemele and Polapola as stars in the constellation of Maiakū, also known as Orion's Belt.

- ▲ pu'u | peak or hill
- wahi pana | storied place or other cultural site
- heiau | ceremonial structure
- ahu | cairn for ceremony or landmark
- pōhaku | boulder
- waialele | waterfall
- loko i'a | fishpond
- nā lo'i pa'aka'i o 'Ukulā | salt pans of 'Ukulā
- — Kekanaka'i'imi'ike's path in *Na Mai'a o Manuahi*
- ka 'ili o Manuahi | the subdivision of Manuahi
- Waimaka o Hi'iaka | the place Kia and Pele meet

## 'UKULĀ

An ancient Hawaiian salt pan used in the present

Another Hanapēpē ka'ao, mapped in brown, explains the origins of the coastal 'Ukulā salt pans. One day Kia, a Hanapēpē kama'āina (native-born), began to cry because she feared the extra fish she caught would be wasted. Pele appeared to Kia as an elderly woman and instructed Kia to bury her fish so the salted earth could preserve her catch. Pele harvested Kia's tears in a basin of 'alaea (red earthen clay), the first salt at 'Ukulā. The area is also known as Waimaka o Hi'iaka (the tears of Hi'iaka).

# HANAPĒPĒ AHUPUA‘A

MAUKA, MAKAI | FROM THE MOUNTAINS TO THE OCEAN

## ABUNDANT WATER, DIVERSE FOOD SYSTEMS

Hanapēpē Ahupua‘a is rich in freshwater. Plentiful rainfall from Mount Wai‘ale‘ale, the highest mountain on Kaua‘i, replenishes the watershed – feeding the ancient rivers that carved the distinctive valley canyons seen today.

Hanapēpē’s freshwater abundance has nourished centuries and generations of communities. Hawaiian-engineered agricultural systems maximized resources, productivity, and fostered connection to ‘āina (land). Lo‘i kalo (irrigated taro fields) were developed throughout the ahupua‘a, and loko i‘a (fishponds) were built along the Hanapēpē River. The lo‘i pa‘akai (salt pans) of ‘Ukulā, visible in the historic aerial on the upper left, are spring-fed. Families fished for moi (threadfish) and ‘ama‘ama (mullet) at the muliwai (river mouth) and for the prized ‘o‘opu (gobies) upstream.

In Hawaiian genealogy, “ulu mai la ua alualu la, a lilo i kalo” (people come from the kalo plant). As an ancestor of Hawaiians, kalo symbolizes the inherent responsibility Hawaiians have to care for their land. Hawaiians introduced kalo to the archipelago and have cultivated over 300 varieties of this food staple. Two kalo types are well-adapted to Hanapēpē. Ha‘o-kea, a fast-growing kalo, thrives in the cold streams and shallow soils of the uplands. Na-kalo-a-‘Ola, named for a ruling ali‘i (chief) of early Kaua‘i, is found in the highest, inaccessible upland areas.

Hanapēpē’s expansive agricultural and aquacultural systems supported a large population. Their conversion into historic-era kalo, rice, and sugarcane cultivation fostered the growth of modern Hanapēpē town and community.

Hawaiians recognized the deep connections of their land and seascapes, from the highest mountain peaks to spring-carved subterranean realms, and the ocean depths beyond the reef. Wahi pana featuring water reinforce this vast ecological knowledge. In the ka‘ao Keamelemele, Pāpa‘i, the mo‘o (water spirit guardian) of Hanapēpē, is concealed at Pu‘uopāpa‘i, a volcanic vent and freshwater spring.

Pele is also associated with Pu‘uopāpa‘i and the creation of subterranean lava tubes spanning Hanapēpē Valley. Pele’s brother, Kamohoali‘i, the chief of sharks, swam up these channels to the famed waterfall, Manawaiopuna. Heiau (ceremonial structures) like Kauakahiunu, the geometric coastal structures and enclosures visible in the historical aerial image to the right, were dedicated to the freshwater deity Kāne and his companion, the saltwater deity Kanaloa.

Historic 1928 aerial photograph showing ancient heritage sites of coastal Hanapēpē, including the lo‘i pa‘akai and heiau associated with freshwater resources



Historic photograph of kalo and other forms of agriculture in Hanapēpē Valley